

were evident—the long straight beak, the broad white wing-stripe, the white band across the upper tail-coverts contrasting with the black tail and the legs trailing behind the tail. Their flight was straight and low, only a foot or so above the water.

What surprised me, however, was their remarkable tameness. I was pulling the boat and making a certain amount of splash and even then I was able to approach to within 15 feet of the birds. I had to kick water at them to make them fly so that I could identify them positively.

—DON REID, Wembley.

Lamprey Attacking Australian Salmon.—In view of the paucity of data concerning the feeding habits of the lamprey (*Geotria australis*) during its marine phase it is of value to place on record any casual observations which might contribute to the building up of a stock of facts on the subject.

While holidaying at Albany in February, 1946 I was fishing with my father off the end of the Deepwater Jetty. We noticed a large fish swimming near the surface. Whilst my father was burleying it up with pieces of weedy whiting I baited a heavy line with a live weedy whiting and threw it in. The large fish struck very sharply and after a spirited fight allowed itself to be hauled close enough to be gidgied and landed. It proved to be an Australian Salmon (*Arripis trutta*), which weighed 19lb. 2oz. Attached to the left side of the salmon, about one inch forward of the vent and about half-an-inch above the mid ventral line, was a greenish-grey lamprey. It was about as thick as a large thumb and about 15 inches in length when stretched out but seemed to shrink to about 12 inches when dislodged from the salmon. One of the bystanders stamped his heel on the lamprey and I then threw it back into the sea—it felt very slimy when I was handling it. The lamprey left an oval-shaped sear of red flesh which stood out very starkly on the salmon's side.

—W. H. BUTLER, Mt. Lawley.

Drowning Fatalities among Kookaburras.—Why do so many Kookaburras (*Dacelo gigas*) lose their lives by drowning? Over the last twenty-five years I have been amazed at the number of Kookaburras which lose their lives in this way. When I was in the Barlee Range I noticed many instances of the Blue-winged species (*D. leachii*) dying in the big stock tanks which hold from 10,000 to 20,000 gallons of water. When I first came to Coolup I built a large circular trough which held some 3,000 gallons and was about two feet deep. In the first summer numerous Kookaburras lost their lives and yet in recent years there has been not one case of drowning in this trough. At the end of last year I put down two more troughs of a smaller size, about 700 gallons each, in a scrub paddock where no water was found in the summer time. Over the last

month (January) four Kookaburras have died in one of these troughs though none have died in the others, yet they are only 30 yards apart. I would like to point out also that no other birds, except Kookaburras, have died in this manner.

There would appear to be good grounds for thinking the birds only die in artificial water troughs which are new to them and that once caught they become wise. Otherwise there would be a steady death roll every year. But what induces them to dive into the water? Is it an inherited instinct which has outlived its usefulness? Or is it, perhaps, territorial behaviour against their own reflection? This might be cleared up to some extent if the birds were examined to see if they were all young birds which perish in this manner.

—ANGUS ROBINSON, "Yanjettee," Coolup.

Races of the White-tailed Black Cockatoo.—In the *Western Australian Naturalist*, vol. 1, 1948, p. 137, Mr. I. C. Carnaby described a subspecies of the White-tailed Black Cockatoo (*Calyptorhynchus baudinii latirostris*) from the drier parts of the South-west on the basis of its shorter and broader bill than that of the race from the heavy-forested corner of the South-west (*C. b. baudinii*). Below I give measurements of the bills of 34 birds which were shot at Bridgetown as orchard pests:

Culmen	Width	Culmen-width ratio	Culmen	Width	Culmen-width ratio
mm.	mm.		mm.	mm.	
59	21	2.80	54.1	21.8	2.48
59	21	2.80	53.4	21.5	2.48
53.7	19.6	2.74	54.2	22	2.46
56	21	2.66	54.0	22.1	2.44
54.0	20.4	2.65	53.5	21.9	2.44
55.0	20.8	2.64	52.3	21.4	2.44
55	21	2.62	51.7	21.2	2.44
52.3	20.0	2.62	53.1	22.0	2.41
55.8	21.4	2.61	52	21.8	2.39
46	19	2.57	53.0	22.3	2.38
54.2	21.2	2.56	56.5	23.9	2.36
53.1	20.8	2.55	53.2	22.5	2.36
53.1	21.2	2.50	52.4	22.4	2.34
54.4	21.8	2.50	52.1	22.4	2.33
55.1	22	2.50	45.1	20	2.26
53.2	21.4	2.49	52.3	23.2	2.25
55.9	23.6	2.48	44	21	2.09

These figures corroborate Mr. Carnaby's conclusions. The mean of the Bridgetown ratio is 2.49 compared with Mr. Carnaby's figure of 2.40 for *C. b. baudinii* generally in the S.W. That for *C. b. latirostris*, the mallee form, is given as 1.88. Data from other districts would be very welcome to find out whether there is a gradual transition between the two races or whether there is a stepped cline, and if so where the zone of demarcation is. Any bird shot should be carefully measured or the head cut off and sent to the W.A. Museum.

—H. M. WHITTELL, Bridgetown.